CRF Friors Corrocted by the STIC Systems Branch CRF Processing Date: Sorbi Number: (Edited by: (orlined by: Changed a lile from non-ASCII to ASCII Changed the margins in cases where the sequence text was "wrapped" down to the next line. Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was

The prior application data; or

other Added the mandatory heading and subheadings for "Current Application Data". Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEO ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEO ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: . . . Deleted extra, invalid, headings used by an applicant, specifically: Deleted: __ non-ASCII *garbage* at the beginning/end of files; __ secretary initials/filename at end of file; page numbers throughout text; Other invalid text, such as _____ Inserted mandatory headings, specifically: Corrected an obvious error in the response, specifically: Edited identifiers where upper case is used but lower caso is required, or vice versa. Corrected an orror in the Number of Sequences field, specifically: A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a Patentin bug). Sequences corrected: ____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

Corrected 6/607 and 6/707 numeric ideas

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/284,327

DATE: 10/04/2001
TIME: 12:43:06

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10042001\I284327.raw

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3 <110> APPLICANT: Genencor International, Inc.
      6 <120> TITLE OF INVENTION: Novel EGIII-Like Enzymes, DNA Encoding
              Such Enzymes and Methods for Producing Such Enzymes
     10 <130> FILE REFERENCE: GC516-2-PCT
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/284,327
C--> 13 <141> CURRENT FILING DATE: 1999-04-10
     15 <160> NUMBER OF SEQ ID NOS: 41
     17 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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    21 <212> TYPE: PRT
    22 <213> ORGANISM: Artificial Sequence
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    25 <223> OTHER INFORMATION: Synthetic
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    45 <212> TYPE: PRT
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69 <212> TYPE: PRT

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10042001\1284327.raw

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 79 <210> SEQ ID NO: 6
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81 <212> TYPE: DNA
82 <213> ORGANISM: T. reesei
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    gaccagtggg caaccttcac tggcaacggc tacacagtca gcaacaacct ttggggagca
86
                                                                            120
87
    teageegget etggatttgg etgegtgaeg geggtatege teageggegg ggeeteetgg
                                                                            180
    cacgcagact ggcagtggtc cggcggccag aacaacgtca agtcgtacca gaactctcag
                                                                            240
89
    attgccattc cccagaagag gaccgtcaac agcatcagca gcatgcccac cactgccagc
                                                                            300
90 tggagctaca gcgggagcaa catccgcgct aatgttgcgt atgacttgtt caccgcagcc
                                                                            360
91
    aacccgaatc atgtcacgta ctcgggagac tacgaactca tgatctggct tggcaaatac
                                                                            420
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    acgctctact atggctacaa cggagccatg caagtctatt cctttgtggc ccagaccaac
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94 actaccaact acageggaga tgtcaagaac ttettcaatt ateteegaga caataaagga
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    tacaacgctg caggccaata tgttcttagc taccaatttg gtaccgagcc cttcacgggc
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107
                                      25
108
     Val Ser Asn Asn Leu Trp Gly Ala Ser Ala Gly Ser Gly Phe Gly Cys
109
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     Val Thr Ala Val Ser Leu Ser Gly Gly Ala His Ala Asp Trp Gln Trp
110
111
     Ser Gly Gly Gln Asn Asn Val Lys Ser Tyr Gln Asn Ser Gln Ile Ala
112
113
114
     Ile Pro Gln Lys Arg Thr Val Asn Ser Ile Ser Ser Met Pro Thr Thr
115
                                          90
116
    Ala Ser Trp Ser Tyr Ser Gly Ser Asn Ile Arg Ala Asn Val Ala Tyr
117
                 100
                                     105
                                                          110
    Asp Leu Phe Thr Ala Ala Asn Pro Asn His Val Thr Tyr Ser Gly Asp
118
119
             115
                                 120
                                                      125
120
    Tyr Glu Leu Met Ile Trp Leu Gly Lys Tyr Gly Asp Ile Gly Pro Ile
121
                             135
122
    Gly Ser Ser Gln Gly Thr Val Asn Val Gly Gly Gln Ser Trp Thr Leu
123
                         150
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    Tyr Tyr Gly Tyr Asn Gly Ala Met Gln Val Tyr Ser Phe Val Ala Gln
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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10042001\1284327.raw

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125
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                                          170
 126 Thr Asn Thr Thr Asn Tyr Ser Gly Asp Val Lys Asn Phe Phe Asn Tyr
                  180
                                      185
 128 Leu Arg Asp Asn Lys Gly Tyr Asn Ala Gly Gln Tyr Val Leu Ser
 129
              195
                                  200
 130 Tyr Gln Phe Gly Thr Glu Pro Phe Thr Gly Ser Gly Thr Leu Asn Val
 131
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                              215
                                                  220
 132 Ala Ser Trp Thr Ala Ser Ile Asn
 133
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 135 <210> SEQ ID NO: 8
 136 <211> LENGTH: 234
 137 <212> TYPE: PRT
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143 Gln Thr Ser Cys Asp Gln Trp Ala Thr Phe Thr Gly Asn Gly Tyr Thr
144
                                      25
145 Val Ser Asn Asn Leu Trp Gly Ala Ser Ala Gly Ser Gly Phe Gly Cys
146
    Val Thr Ala Val Ser Leu Ser Gly Gly Ala Ser Trp His Ala Asp Trp
148
149
     Gln Trp Ser Gly Gly Gln Asn Asn Val Lys Ser Tyr Gln Asn Ser Gln
150
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151
     Ile Ala Ile Pro Gln Lys Arg Thr Val Asn Ser Ile Ser Ser Met Pro
152
                     85
153
    Thr Thr Ala Ser Trp Ser Tyr Ser Gly Ser Asn Ile Arg Ala Asn Val
154
                                     105
    Ala Tyr Asp Leu Phe Thr Ala Ala Asn Pro Asn His Val Thr Tyr Ser
155
156
             115
                                 120
157
     Gly Asp Tyr Glu Leu Met Ile Trp Leu Gly Lys Tyr Gly Asp Ile Gly
158
                             135
                                                 140
     Pro Ile Gly Ser Ser Gln Gly Thr Val Asn Val Gly Gly Gln Ser Trp
159
160
                         150
     Thr Leu Tyr Tyr Gly Tyr Asn Gly Ala Met Gln Val Tyr Ser Phe Val
161
162
                     165
                                         170
163 Ala Gln Thr Asn Thr Thr Asn Tyr Ser Gly Asp Val Lys Asn Phe Phe
164
                                     185
165 Asn Tyr Leu Arg Asp Asn Lys Gly Tyr Asn Ala Ala Gly Gln Tyr Val
             195
                                 200
167
     Leu Ser Tyr Gln Phe Gly Thr Glu Pro Phe Thr Gly Ser Gly Thr Leu
168
                             215
    Asn Val Ala Ser Trp Thr Ala Ser Ile Asn
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170
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174 <212> TYPE: PRT
175 <213> ORGANISM: H. schweinitzii
177 <400> SEQUENCE: 9
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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10042001\I284327.raw

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180 181	Glr	Thr	: Sei	Cys 20	Asp	Gln	Tyr	Ala	Thr 25		e Ser	Gly	y Asr	n Gly 30	15 Tyr	lle
182 183	Val	Ser	35	Asn	Leu	Trp	Gly	Ala		Ala	Gly	Sei	Gl _y	7 Phe	Gly	Cys
184 185	Val	Thr 50	Ser	Val	Ser	Leu	Asn 55	Gly	Ala	ı Ala	Ser	Trp	His	8 Ala	Asp	Trp
186 187		Trp	Ser	Gly	Gly	Gln 70	Asn	Asn	Val	. Lys	Ser	Tyr	Glr	Asn	Val	Gln 80
188 189					85					90					95	Pro
190 191				100					105					Ala 110	Asn	
192 193			112					120					125			Ser
194 195		T30					135					140				Gly
196 197	145					150					155			Gln		160
198 199					,165					170				Ser	175	
200				180					185					Asn 190		
202 203 204			195					200					205	Gln		
204 205 206		210					215				Thr	Gly 220	Ser	Gly	Thr	Leu
207	225			Ser		230	Ala	ser	ııe	Asn						
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214 <400> SEQUENCE: 10 215 Met Lys Ala Phe His Leu Leu Ala Ala Leu Ala Gly Ala Ala Val Ala																
215 216 217	Т				5					10					15	
218				20					25					Gly 30		
219 220			33					40					45	Ser		
221 222 223		50					55					60		Ser		
223 224 225	65					70					75			Ser		80
223 226 227					85					90				Ile	95	
228	TT6	FIO	1111	100	MIG .	Arg	rrp	ser	Tyr 105	Asp	Asn	Thr	Gly	Ile 110	Arg	Ala

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10042001\I284327.raw

229 230	Asp	Va]	L Ala 11:	a Ty	r Asp) Leu	ı Phe	Thi 120		a Ala	a Asp	Ile			Val	Thr
231		Sei			туз	Glu	ı Leı			e Trp	Leu	Ala	125 Arq) Tvr	Glv	Gly
232		130)				135	5				140)			
233	Val	Glr	Pro) Ile	e, Gl∑	, Ser	Glr	ıle	Ala	Thr	Ala	Thr	· Val	Asp	Gly	Gln
234	145)				150)				155					160
235	Thr	Trp	Glu	ı Let	ı Trp	туг	Gl3	/ Ala	Asn	Gly	Ser	Gln	Lys	Thr	Tyr	Ser
236	Dho	. 37-1	3 1 <u>-</u>	. D	165					170					175	
237 238	Pne	vaı	. Ala	1 Pro	Thr	Pro	Ile	Thr			Gln	Gly	Asp	Val	Asn	Asp
239	Dho	Dho	Tre	180		mb			185					190		
240	FIIC	FILE	: Буб 195	; TĀT	ьeu	Inr	GII	ASD	Hls	GLy	Phe	Pro			Ser	Gln
241	Tvr	Len			LOU	C1n	Dho	200			D	D1	205			
242	- 1 -	210		. 1111	ьeu	GIII	215	: сту	THE	GIU	Pro			GLy	Gly	Pro
243	Ala	_		Ser	Va1	Ser			Son	- או	Con	220	<i>α</i> 1	01		Gly
244	225				,	230	no.	ııp	261	нта	235	val	GIII	GIN	Ата	
245	Phe	Glu	Pro	Trp	Gln			Δla	Glv	Τ.Δ.11	7) J	Val	λcn	Con	Dha	240 Ser
246					245		U -1	****	OLY	250		vaı	ASII	ser	255	ser
247	Ser	Thr	Val												2,5	
250	<210				11											
	<211															
	<212															
253	<213	> OR	GANI	SM:	A. k	awac:	hii									
	<400															
256	Met	Lys	Leu	Ser	Met	Thr	Leu	Ser	Leu	Phe	Ala	Ala	Thr	Ala	Met	Gly
257	Т				5					10					15	
258	GIn	Thr	Met	Cys	Ser	Gln	\mathtt{Tyr}	Asp	Ser	Ala	Ser	Ser	Pro	Pro	Tyr	Ser
259	37 3	3	a 1	20	_	_			25					30		
260 261	val	ASII	GIN	Asn	Leu	Trp	Gly		Tyr	Gln	Gly	Thr		Ser	Gln	Cys
262	Wa 1	Пттт	35	2	T	т	0	40	_			_	45			
263	Val	50	Val	ASP	гуу	Leu	ser	ser	Ser	GLY	Ala		Trp	His	Thr	Lys
264	Tro	_	Trn	Sar	Gl v	G1 v	55	C1	mh	37 o 3	.	60	_	_	_	_
265	65			DCI	GLY	Gly 70	Giu	GIY	TIII	val	тув 75	ser	туг	Ser	Asn	
266		Leu	Thr	Phe	Asp	Lys	Lvs	Len	Va 1	Sor		17 - 1	Cor	Com	т1.	80
267	-				85	2,5	275	пси	Val	90	АЗР	vaı	ser	ser	95	PLO
268	Thr	Ser	Val	Thr	Trp	Ser	Gln	Asp	Asp		Asn	Va 1	Gln	Δla) an	Wa 1
269				100	-				105			, 41	OIN	110	кэр	Val
270	Ser	Tyr	Asp	Leu	Phe	Thr	Ala	Ala		Ala	Asp	His	Ala	Thr	Ser	Ser
271			115					120					125			
272	Gly	Asp	Tyr	Glu	Leu	Met	Ile	Trp	Leu	Ala	Arg	Tyr	Gly	Ser	Val	Gln
273		T30					135					140				
274	Pro	Ile	Gly	Lys	Gln	Ile	Ala	Thr	Ala	Thr	Val	Gly	Gly	Lys	Ser	Trp
275	145					150					155					160
276	GLu	Val	\mathtt{Trp}	\mathtt{Tyr}	Gly	Thr	Ser	Thr	Gln		Gly	Ala	Glu	Gln	Lys	Thr
277					165					170					175	
278 279	туr	ser	Phe	val	Ala	Gly	Ser	Pro	Ile	Asn	Ser	Trp	Ser	Gly	Asp	Ile
280	T ***	λα∽	Dh -	180	7	m	.	-1	185	_		_		190		
200	Lys	АЅР	, hue	ьue	asn	Tyr	ьeu	Thr	GIn	Asn	Gln	Gly	Phe	Pro	Ala	Ser

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/284,327

DATE: 10/04/2001 TIME: 12:43:07

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10042001\1284327.raw